

CLAIMS

What we claim as our invention is:

1) A faucet having multiple water discharges including a housing, input water connection for said housing, downward stream discharge on said housing, upward fountain discharge on said housing, upward spray discharge on said housing, diverter valve control means within said housing,

manual means accessible from exterior of said housing for operating said diverter valve control means to selectively divert water from said inlet to any of said discharge means,

said diverter valve control means having an input connection connected to said housing input water connection and a plurality of output connections, and means to selectively define a flow path from said input connection to any of said output connections.

2) The faucet of claim 1 wherein said diverter valve of claim 1 comprising:

A valve housing characterized by an interior enclosing an axially elongated space having a fluid inlet and a plurality of outlet connections,

a flow diverter having multiple fluid outlets, axially rotatable in a plurality of positions,

means for connecting said valve to said faucet in fluid communication,

means of defining flow path from said fluid inlet to any single fluid outlet,

a multi-position handle and shaft operatively associated with said flow diverter, having a specific position associated with each outlet, wherein a flow path is defined from the faucet inlet through said valve and exiting only through the specified discharge,

means of defining absolute upper and lower rotation limits of said shaft,

manual means accessible from the exterior of said housing for adjusting upper and lower rotation limits of said handle,

seal means operatively associated with said flow diverter and interior of said housing wherein when said valve means is in position for fluid communication between fluid inlet and selected outlet, seal means prevents fluid flow through remaining outlets,

seal means operatively associated with exterior of valve and faucet housing wherein output conduits are individually sealed to prevent cross flow

3) The faucet of claim 2 wherein said flow diverter is further characterized as a spool of smaller diameter than the interior of said diverter valve interior having an open end by which fluid communication is established with said diverter valve input, an oppositely located closed end facilitating engagement by said handle means, a plurality of outputs circumferentially aligned adjacent to said open end,

each of said outputs encircled by a circumferential ring acting as a seal means between said flow diverter and said diverter valve interior.

4) The faucet of claim 2 wherein said handle assembly is comprised of: a handle external to the faucet body, a shaft engagingly connected to said handle and said spool,

said adjustable upper and lower rotation limit means further characterized by a protruding tab on the interior surface of said handle and a pair of rings with protruding tabs, wherein when said stop rings are secured between said diverter valve and said faucet body said handle tab interfaces with said stop ring tabs to define the limits of rotation for said handle assembly.

5) The faucet of claim 1 wherein selection of said upper discharges is alternatively facilitated by a axially rotatable diffuser cap assembly in fluid communication with said upward outlets on said faucet housing,

said diffuser cap comprised of a central fountain duct for said fountain discharge means and a diffuser for said spray discharge means,

wherein said fountain outlet, dependent on axial alignment, is alternatively in fluid communication with said upper fountain conduit sealed closed to define the flow path between said conduit and said diffuser means for said spray discharge.

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